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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,880	11/30/2000	Chyi-Cheng Chen	20223 US (C38435/120240)	1470
83522	7590	04/01/2009	EXAMINER	
Bryan Cave LLP 1290 Avenue of the Americas New York, NY 10104			CHANNAVAJJALA, LAKSHMI SARADA	
			ART UNIT	PAPER NUMBER
			1611	
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			04/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/726,880	Applicant(s) CHEN ET AL.	
	Examiner Lakshmi S. Channavajjala	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-27 is/are pending in the application.
- 4a) Of the above claim(s) 16 and 18-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 3-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-29-08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of IDS, amendment and response dated 12-29-08 is acknowledged.

Claims 1 and 3-27 are pending. Claims 16 and 18-27 have been withdrawn from consideration. Claims 1, 3-15 and 17 have been examined.

Response to Arguments

1. Applicant's response, filed 12-29-08 that Chen is disqualified as a reference under 35 U.S.C. § 103(c)(1) as prior art in a rejection under 35 U.S.C. § 103(a) because the subject matter of Chen and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person is persuasive. Therefore, the rejection has been withdrawn.
2. However, in view of the newly cited IDS, a new ground(s) of rejection is made as follows:

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 3-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,968,251 to Auweter (submitted on PTO 1449 of 12-29-08) alone or Auweter in view of EO 937412 ('412).
5. Auweter teaches cold water dispersible powders comprising fat soluble vitamins such as carotenoids prepared by the method described in abstract and col. 2, L 27-46.

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For the protective colloids, Auweter teaches the claimed proteins such as fish gelatin, vegetable proteins, and also gum such as gum arabic (col. 4, L 40-53). Auweter teaches a 0.5-20% carotenoids and 10-50% by weight of a protective colloid (col. 4, L 53-59).

Auweter teaches particles of 200 nm size (col. 3, L 51-56). For the claimed vitamins of claims 10-11, Auweter teaches carotenoids esters and not the claimed vitamins.

Auweter teaches the carotenoids powders for food compositions but not tablet preparations. However, preparing an appropriate form of the composition such as powder or solid tablet or liquid depending on the food preparation would have been within the scope of a skilled artisan.

6. Alternatively, Auweter does not exemplify any compositions with the claimed gums or proteins.

7. EP '412 teaches finely divided pulverous carotenoids preparations formed by suspending the active ingredient in an organic solvent, feeding the suspension to a heat exchanger, rapidly mixing with a swellable colloid. EP teaches the particle size such as 213 nm, 225 nm or 400 nm. Among the colloids, EP teaches gelatin, starch, gums, pectin etc (col. 3, L 1-7).

8. It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to prepare the powders of Auweter by incorporating colloids such as polysaccharide gums or proteins such as those taught by Auweter or EP because both references are directed to preparing the claimed powders and further EP suggests colloids such as gelatin and gums as effective in preparing vitamin powder preparations. Further, Auweter suggests preparing the powders with or without an emulsifier and thus

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meet the claimed matrix claim limitations. Further, EP suggests including carotenoids as well as tocopherol (019) and also suggests particles of less than 400 nm (0009).

Accordingly, absent any unexpected advantage, it would have been within the scope of a skilled artisan to prepare vitamin powder preparations of Auweter with the proteins or gums of either reference with the desired particle sizes.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over over US 5,968,251 to Auweter alone or Auweter in view of EO 937412 ('412) as applied to claims 1, 3-14 and 17 above, and further in view of US 3,886,294 to Emodi et al (Emodi, submitted on PTO 1449 of 12-29-08).

10. Auweter and EP fail to teach the claimed moisture content.

11. Emodi also teaches a powder preparation of carotenoids wherein the powder is prepared by mixing fish gelatin with carotenoids crystals and spray drying the resultant solution to a form a stable powder of moisture content less than 2% (example 1 in col.

4). Thus, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to prepare the powders of Auweter or Auweter and EP by spray drying where the final moisture content is less than 2% because Emodi suggests stability of the powders. A skilled artisan would have expected the powders of Auweter to be stable.

Double Patenting

In their response dated 12-29-08, applicants agreed to file a terminal disclaimer upon indicating allowable subject matter. However, at this time no allowable subject matter is indicated. Therefore, the rejection is maintained.

The following rejection has been withdrawn in view of the amendment:

Claim Rejections - 35 USC § 112

12. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Instant claim recites "acetylated derivatives thereof, which is vague and indefinite because the expression fails to state the derivatives of what is being claimed. It is unclear as to the meets and bounds of the claimed limitation are.

14. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 12-29-08 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila G. Landau can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lakshmi S Channavajjala/
Primary Examiner,
Art Unit 1611
March 30, 2009